



**DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY
AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION
NOTICE OF ACCEPTANCE (NOA)**

**MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION**
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/pera/

**Leader Industries, Inc.
P.O. Box 40913
Nashville, TN 37204**

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Model DC-HWD550 Aluminum Louver

APPROVAL DOCUMENT: Drawing No. **08-01058**, titled "DC-HWD550 Aluminum Vertical Louver Muller and Single Units" Sheets 1 through 12 of 12, dated 07/19/2010, with revision A dated 01/05/2011, prepared by Leader Industries, Inc, signed and sealed by Luis R. Lomas, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA # **10-0920.16** and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**



[Signature]
04/25/2012

NOA No. 12-0208.11
Expiration Date: April 07, 2016
Approval Date: May 3, 2012
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS “Submitted under NOA # 10-0920.16”

1. Drawing No. **08-01058**, titled “DC-HWD550 Aluminum Vertical Louver Mulled and Single Units” Sheets 1 through 12 of 12, dated 07/19/2010, with revision A dated 01/05/2011, prepared by Leader Industries, Inc, signed and sealed by Luis R. Lomas, P.E.

B. TESTS “Submitted under NOA # 10-0920.16”

1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of DC-HWD550 Aluminum Louver Systems", prepared by National Certified Testing Laboratories, Report No. **210-3692-1**, dated 06/14/2010, signed and sealed by Gerald J. Ferrara, P.E.

C. CALCULATIONS “Submitted under NOA # 10-0920.16”

1. Anchor calculations prepared by Luis R. Lomas, P.E., dated 07/20/2010 and 01/05/2011, signed and sealed by Luis R. Lomas, P.E.

D. QUALITY ASSURANCE

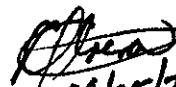
1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA)

E. MATERIAL CERTIFICATIONS

1. None.

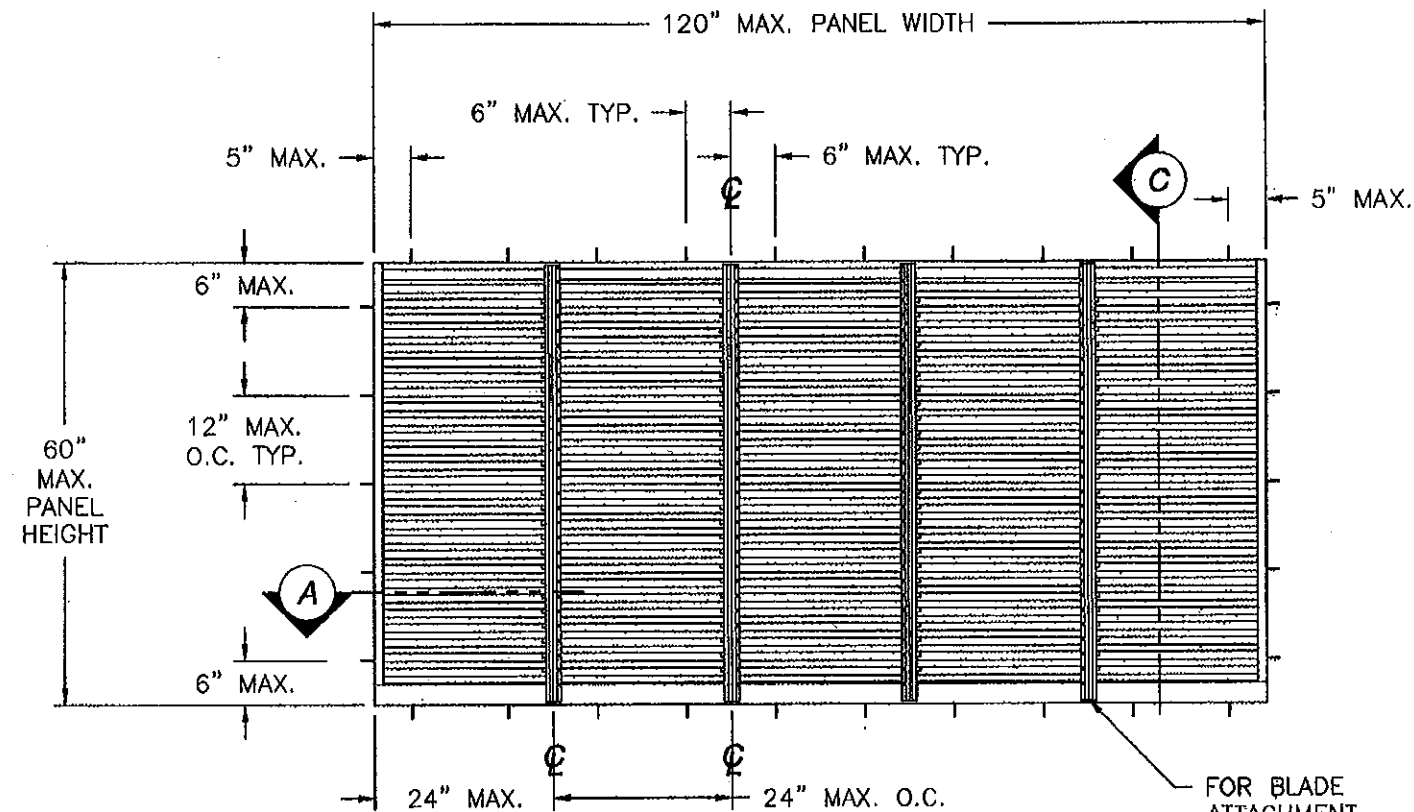
F. STATEMENTS

1. Statement letter of code conformance to 2010 FBC and no financial interest, dated 01/24/2012, issued, signed and sealed by Luis R. Lomas, P.E.


04/25/2012

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 12-0208.11
Expiration Date: April 07, 2016
Approval Date: May 3, 2012

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



DC-HWD550 ALUMINUM SINGLE VERTICAL LOUVER
INTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±120PSF	LARGE MISSILE IMPACT

NOTES:

- 1) THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING THE HVHZ.
- 2) WOOD FRAMING, STEEL FRAMING AND CONCRETE OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND CONCRETE OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 3) 1X BUCK OVER CONCRETE IS OPTIONAL. WHERE 1X BUCK IS NOT USED DISSIMILAR MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 4) ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR $C_d=1.6$ WAS USED FOR WOOD ANCHOR CALCULATIONS.
- 5) FRAME MATERIAL: EXTRUDED ALUMINUM 6063-T5 .080" THICK.
- 6) APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
- 7) SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16" OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4".
- 8) ALL FASTENERS TO BE CORROSION RESISTANT.
- 9) INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW:
 - A. WOOD - MINIMUM SPECIFIC GRAVITY OF $G=0.46$
 - B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3,200 PSI.
 - C. STEEL - 16GA. (.060") MINIMUM (WELDING INSTALLATION).
 - D. STEEL - .1875" MINIMUM (3/8" MACHINE SCREW OR 3/8" BOLT AND NUT INSTALLATION).
 - E. STEEL - 14GA. (.078") MINIMUM (5/16" SELF-TAPPING SCREW INSTALLATION).
- 10) LOUVER TO BE INSTALLED IN LOCATION WHERE ROOM HAS BEEN DESIGNED FOR WATER DRAINAGE, AND THE ROOM WILL HOUSE WATER RESISTANT OR WATER PROOF EQUIPMENT, COMPONENTS OR SUPPLIES.
- 11) LOUVER MAYBE INSTALLED WITH OR WITHOUT EAD DAMPER. SEE SECTION C SHEET 6.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0208-11
Expiration Date 04/07/2016
By *[Signature]*
Miami Dade Product Control

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SHEET NO.	DESCRIPTION
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4	BILL OF MATERIALS AND WELDMENT DETAILS
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11 - 12	COMPONENTS

Approved as complying with the
Florida Building Code
Date 04/07/2011
NOA# 12-0208-16
Miami Dade Product Control
By *[Signature]*

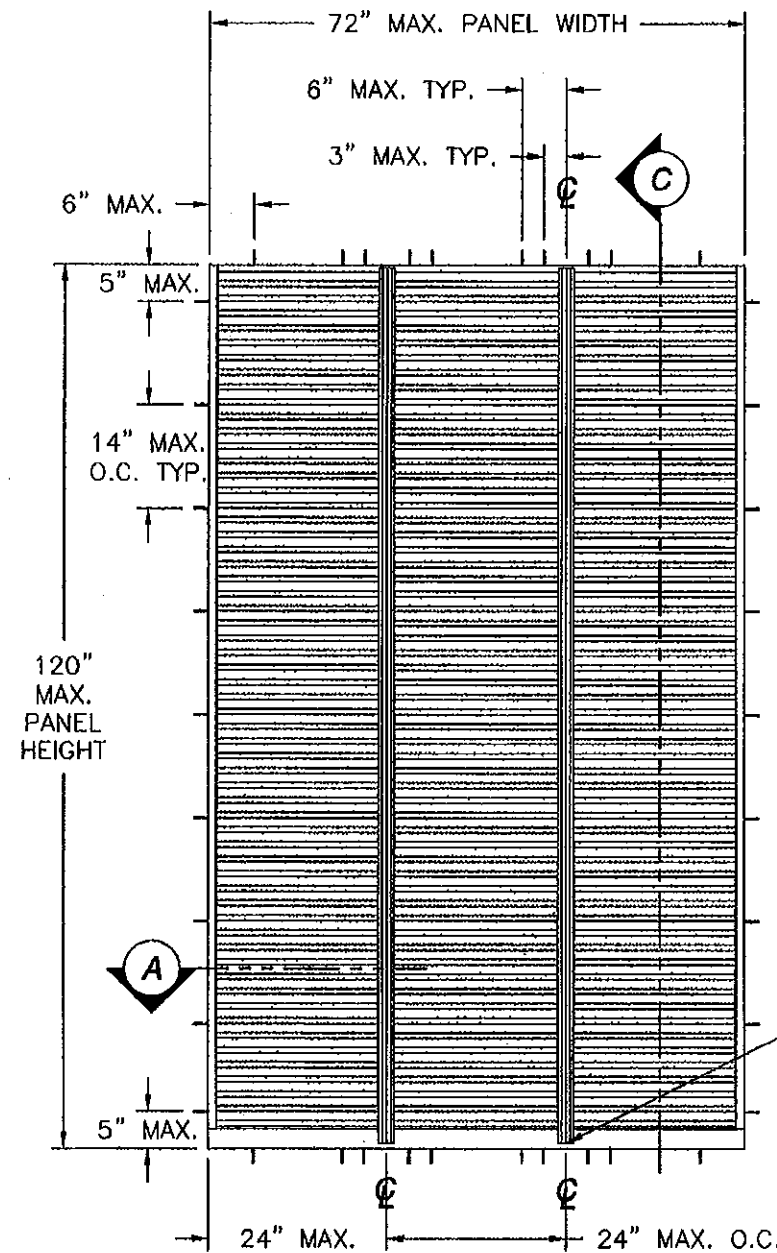
LEADER INDUSTRIES, INC.

2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
SINGLE ELEVATIONS, ANCHORING AND NOTES

DRAWN: TJH	DWG NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 1 OF 12

[Signature]
3/15/11
Luis R. Lomas, P.E.
Florida No. 62614

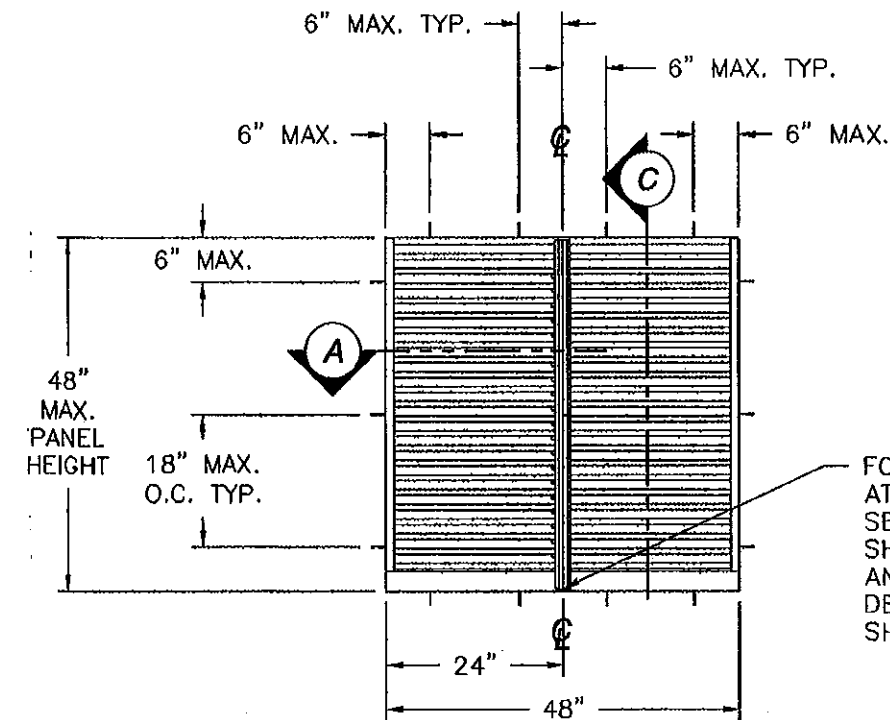


DC-HWD550 ALUMINUM SINGLE
VERTICAL LOUVER
INTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±120PSF	LARGE MISSILE IMPACT

FOR BLADE ATTACHMENT
SEE DETAIL A
SHEET 5
AND WELDMENT
DETAIL D
SHEET 4, TYP.

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Miami Dade Product Control



DC-HWD550 ALUMINUM SINGLE
VERTICAL LOUVER
INTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±180PSF	LARGE MISSILE IMPACT

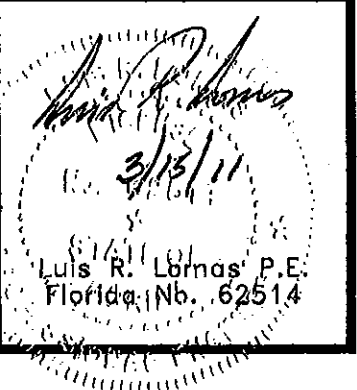
FOR BLADE ATTACHMENT
SEE DETAIL A
SHEET 5
AND WELDMENT
DETAIL D
SHEET 4, TYP.

REVISIONS			
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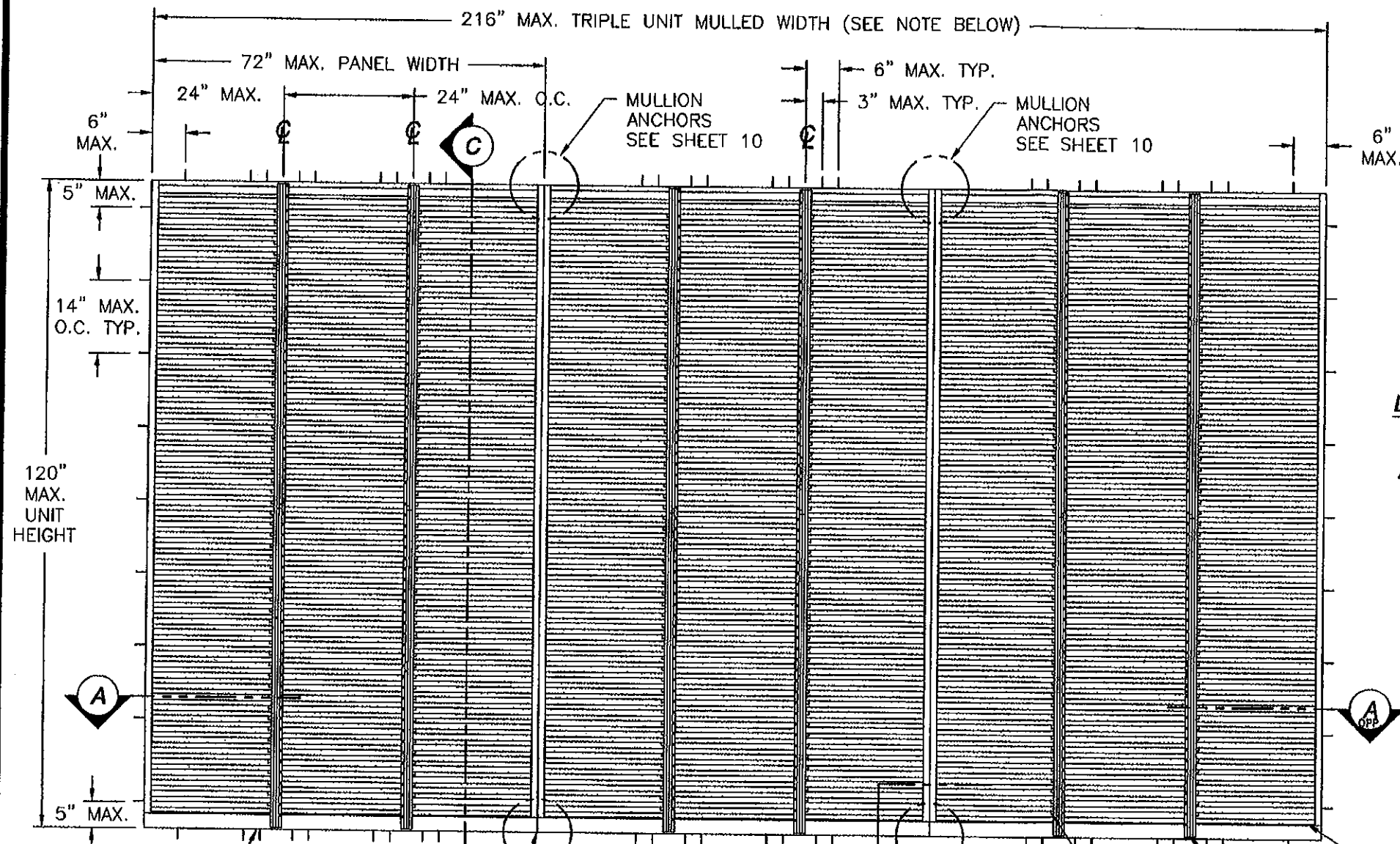
LEADER INDUSTRIES, INC.
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
SINGLE ELEVATIONS, ANCHORING AND NOTES

DRAWN: TJH	DWG NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 2 OF 12



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



DC-HWD550 ALUMINUM MULLED VERTICAL LOUVER
INTERIOR VIEW

3 PANEL MULLED UNIT SHOWN, UNLIMITED MULTIPLES ARE APPROVED AS LONG AS SINGLE PANEL DOES NOT EXCEED SINGLE PANEL SIZE SHOWN IN ELEVATION AND CHART BELOW

DESIGN PRESSURE RATING	IMPACT RATING
±120PSF	LARGE MISSILE IMPACT

SEE WELDMENT
DETAIL E
SHEET 4

SEE SLEEVE
SPLICE DETAIL
SHEET 4
TYPICAL

MULLION
ANCHORS
SEE SHEET 10

MULLION
ANCHORS
SEE SHEET 10

SEE WELDMENT
DETAIL D
SHEET 4
TYP.

FOR BLADE
ATTACHMENT
SEE DETAIL A
SHEET 5
AND WELDMENT
DETAIL D
SHEET 4, TYP.

SEE WELDMENT
DETAIL F
SHEET 3
TYPICAL

MAXIMUM DESIGN PRESURE RATING FOR APPROVED MULLED SIZES
DC-HWD550 VERTICAL LOUVER

Height (in)	Single panel width															
	50.0		60.0		70.0		72.0		80.0		90.0		100.0		110.0	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
60.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
80.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
70.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
72.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
80.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
90.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	-	-	-	-
100.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	-	-	-	-	-	-
110.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	-	-	-	-	-	-	-
120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	-	-	-	-	-	-	-	-

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as complying with the Florida
Building Code
Acceptance No. 12-0208.11
Expiration Date 03/07/2016
By *[Signature]*
Miami Dade Product Control

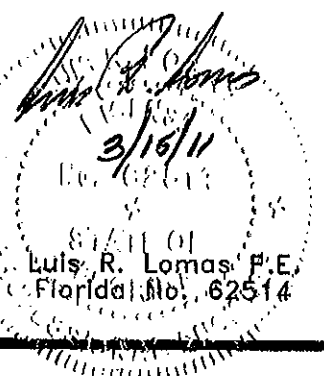
Approved as complying with the
Florida Building Code
Date 04/10/2011
NOA# 10-0720.16
Miami Dade Product Control
By *[Signature]*

LEADER INDUSTRIES, INC.

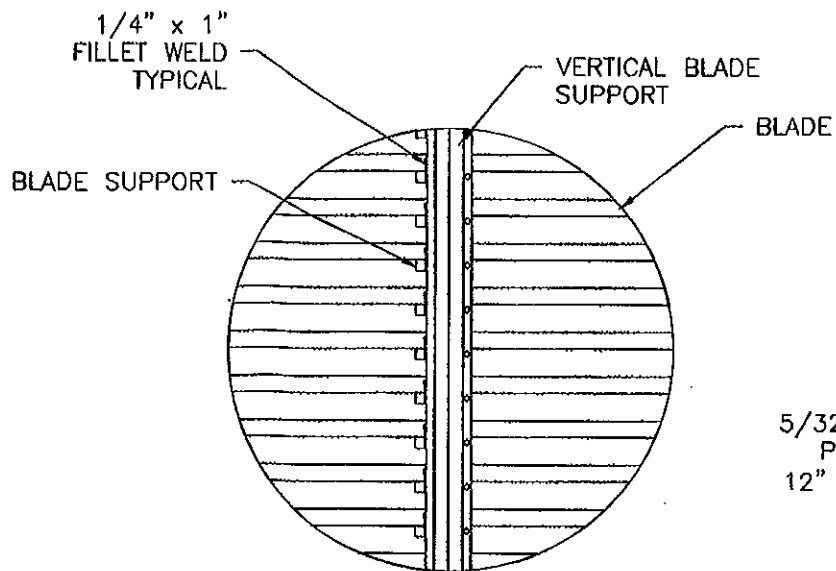
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
MULLED AND SINGLE ELEVATIONS AND ANCHORING

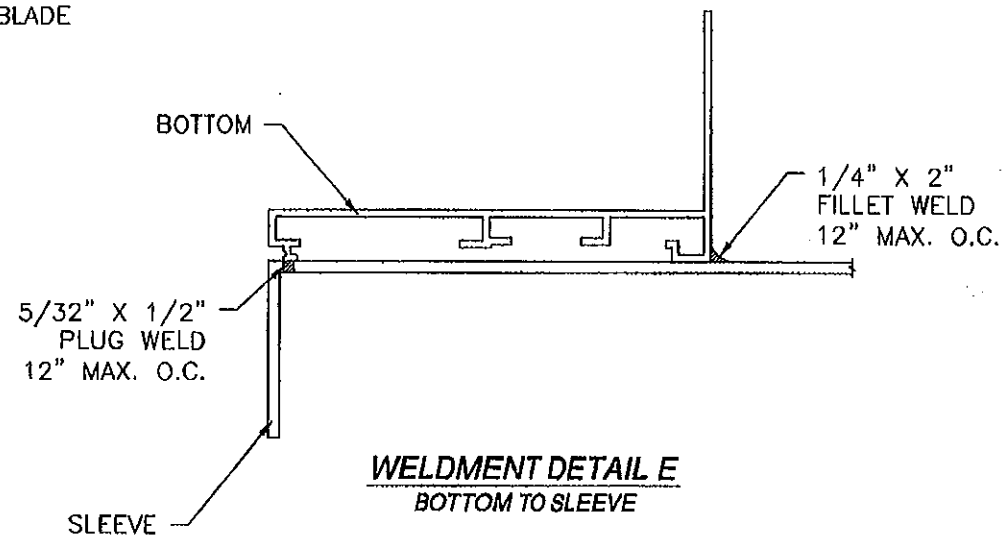
DRAWN: TJH	DWG NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 3 OF 12



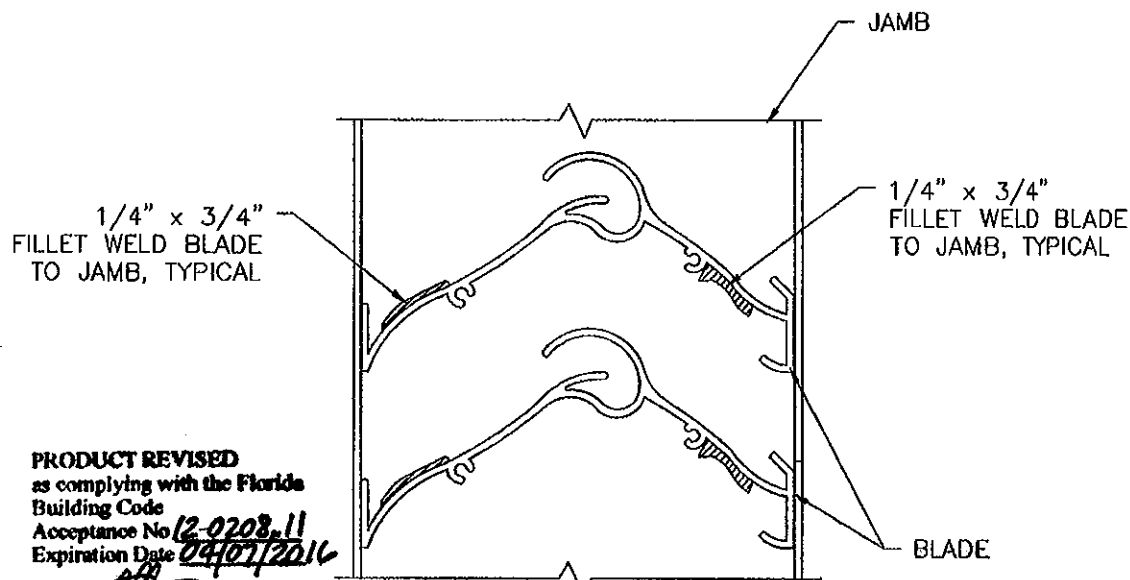
PARTS LIST				
NO.	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	HWD550H	HWD550 HEAD	LEADER INDUSTRIES	ALUMINUM 6063-T5
2	HWD550BO	HWD550 BOTTOM	LEADER INDUSTRIES	ALUMINUM 6063-T5
3	HWD550J	HWD550 JAMB	LEADER INDUSTRIES	ALUMINUM 6063-T5
4	HWD550B	HWD550 BLADE	LEADER INDUSTRIES	ALUMINUM 6063-T5
5	HWD550BS	HWD550 BLADE SUPPORT	LEADER INDUSTRIES	ALUMINUM 6063-T5
6		VERTICAL BLADE SUPPORT	LEADER INDUSTRIES	ALUMINUM 6063-T5
7		INSTALLATION SLEEVE	LEADER INDUSTRIES	ALUMINUM 3003
8		2" x 2" x 3/16" INSTALL ANGLE	LEADER INDUSTRIES	ALUMINUM 6063-T5
9		2" x 4" x 1/4" MULLION ANGLE	LEADER INDUSTRIES	ALUMINUM 6063-T5
10	C4X5.4	MULLION C-CHANNEL	LEADER INDUSTRIES	A36 STEEL
11		2" x 4" x 1/4" x 3 1/2" CLIP	LEADER INDUSTRIES	ALUMINUM 6063-T5
12		#8 x 3/4" TEK SCREW		
13		#12 x 1" TEK SCREW		
14		1/2-13 x 1 1/2" HH BOLT		
15		1/2-13 NUT		
16		#10 x 3/4" TEK		
17		2" x 2" x 3/16" CONTINUOUS ANGLE	LEADER INDUSTRIES	ALUMINUM 6063-T5
18		EAD DAMPER BLADE	LEADER INDUSTRIES	ALUMINUM 6063-T5
19		HAND QUADRANT	LEADER INDUSTRIES	ALUMINUM 6063-T5
20		#14 x 7/8" TEK SCREW		
21		EAD DAMPER HAT CHANNEL	LEADER INDUSTRIES	ALUMINUM 6063-T5
22		EAD DAMPER BLADE STOP	LEADER INDUSTRIES	ALUMINUM 6063-T5



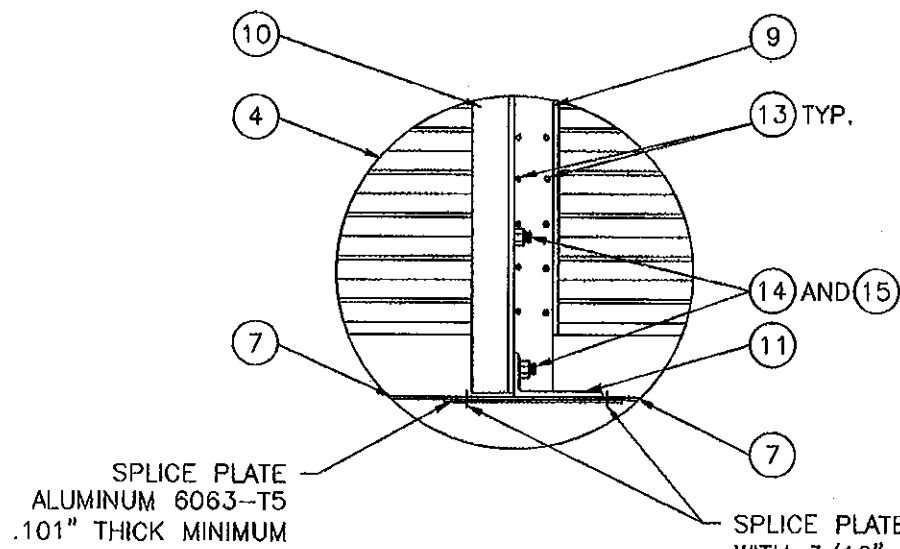
WELDMENT DETAIL D
BLADE TO BLADE SUPPORT



WELDMENT DETAIL E
BOTTOM TO SLEEVE



WELDMENT DETAIL F
BLADE TO JAMB



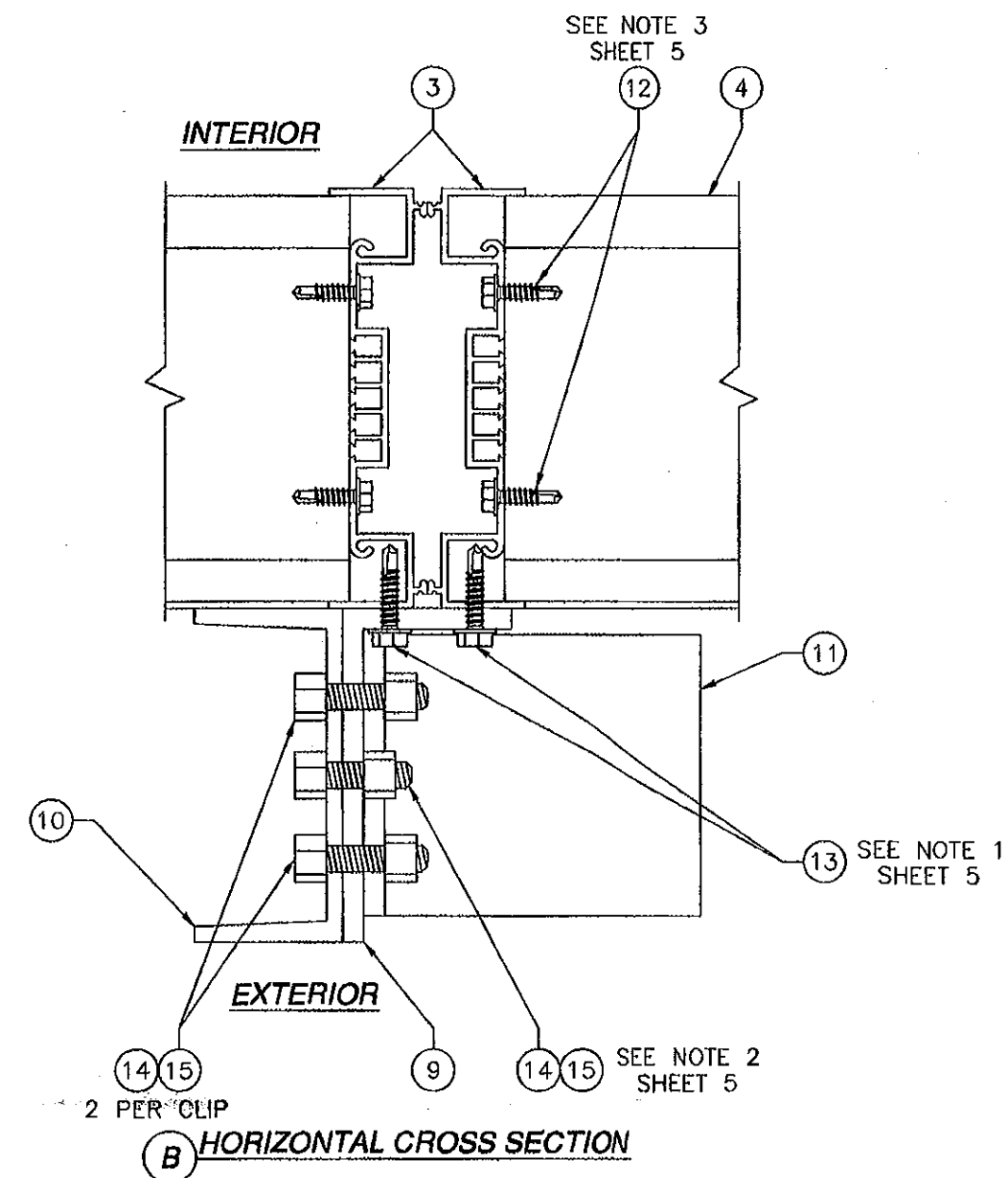
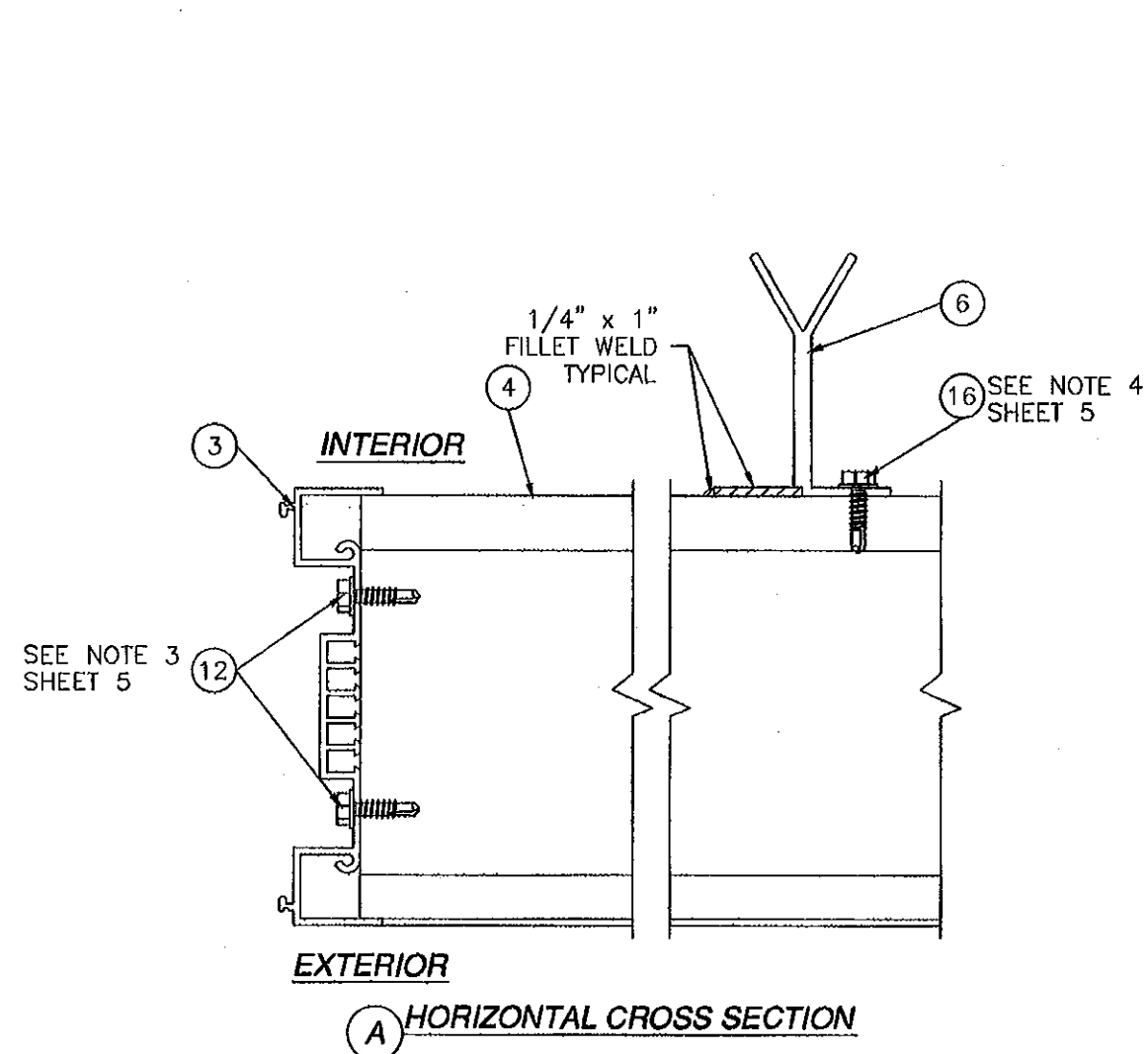
SLEEVE SPLICE DETAIL

SPLICE PLATE IS ATTACHED TO SLEEVE WITH 3/16" POP RIVETS OR #12 x 1" TEK SCREWS, 3" FROM ENDS AND 3" MAX. O.C.

PRODUCT REVISED
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Acceptance No 12-0208-11
Expiration Date 04/07/2016
By *[Signature]*
Miami Dade Product Control

Approved as complying with the Florida Building Code Date 04/07/2011 NOA# 10-0120-16 Miami Dade Product Control By <i>[Signature]</i>				LEADER INDUSTRIES, INC. 2509 CRUZEN STREET NASHVILLE, TN 37211		<i>[Signature]</i> 3/16/11 Luis R. Lomas P.E. Florida No. 62514
DC-HWD550 ALUMINUM VERTICAL LOUVER MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT BILL OF MATERIALS AND WELDMENT DETAILS				DRAWN: TJH DWG NO. 08-01058 REV A		
SCALE NTS		DATE 07/19/10		SHEET 4 OF 12		

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



NOTES:

- 1) LOCATE #12 x 1" TEK SCREW 6" FROM ENDS AND 6" MAXIMUM O.C. THEREAFTER.
- 2) LOCATE 1/2" BOLT AND NUT 6" FROM ENDS AND 12" MAXIMUM O.C. THEREAFTER.
- 3) INSTALL (2) #8 x 3/4" TEK SCREW PER BLADE LOCATION.
- 4) LOCATE #10 x 3/4" TEK SCREW ATTACHING VERTICAL BLADE SUPPORT TO UNIT 2" FROM ENDS AND 2" MAX. O.C. THEREAFTER.

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Expiration Date 04/07/2016
By [Signature]
Miami Dade Product Control

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Florida Building Code
Date 04/07/2011
NOAH 10-0920.16
Miami Dade Product Control
By [Signature]

LEADER INDUSTRIES, INC.

2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
CROSS SECTIONS

DRAWN: TJH	DWG NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 5 OF 12

[Signature]
10/15/11
Luis R. Lomas, P.E.
Florida No. 62514

REVISIONS			
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EXTERIOR

INTERIOR

EXTERIOR

INTERIOR

C VERTICAL CROSS SECTION
WITH SLEEVE AND EAD DAMPER

C VERTICAL CROSS SECTION
WITHOUT SLEEVE AND EAD DAMPER

NOTES:

- 1) EAD DAMPER BLADE STOP IS ATTACHED TO HAT CHANNEL WITH #10 x 3/4" TEK SCREWS SPACED 12" MAX. O.C.
- 2) HAT CHANNEL IS ATTACHED TO INSTALLATION SLEEVE WITH #10 x 3/4" TEK SCREWS SPACED 12" MAX. O.C.
- 3) #14 IS SPACED 12" FROM ENDS AND 12" MAX. O.C. THEREAFTER.
- 4) LOCATE #10 x 3/4" TEK SCREW ATTACHING VERTICAL BLADE SUPPORT TO UNIT 2" FROM ENDS AND 2" MAX. O.C. THEREAFTER.

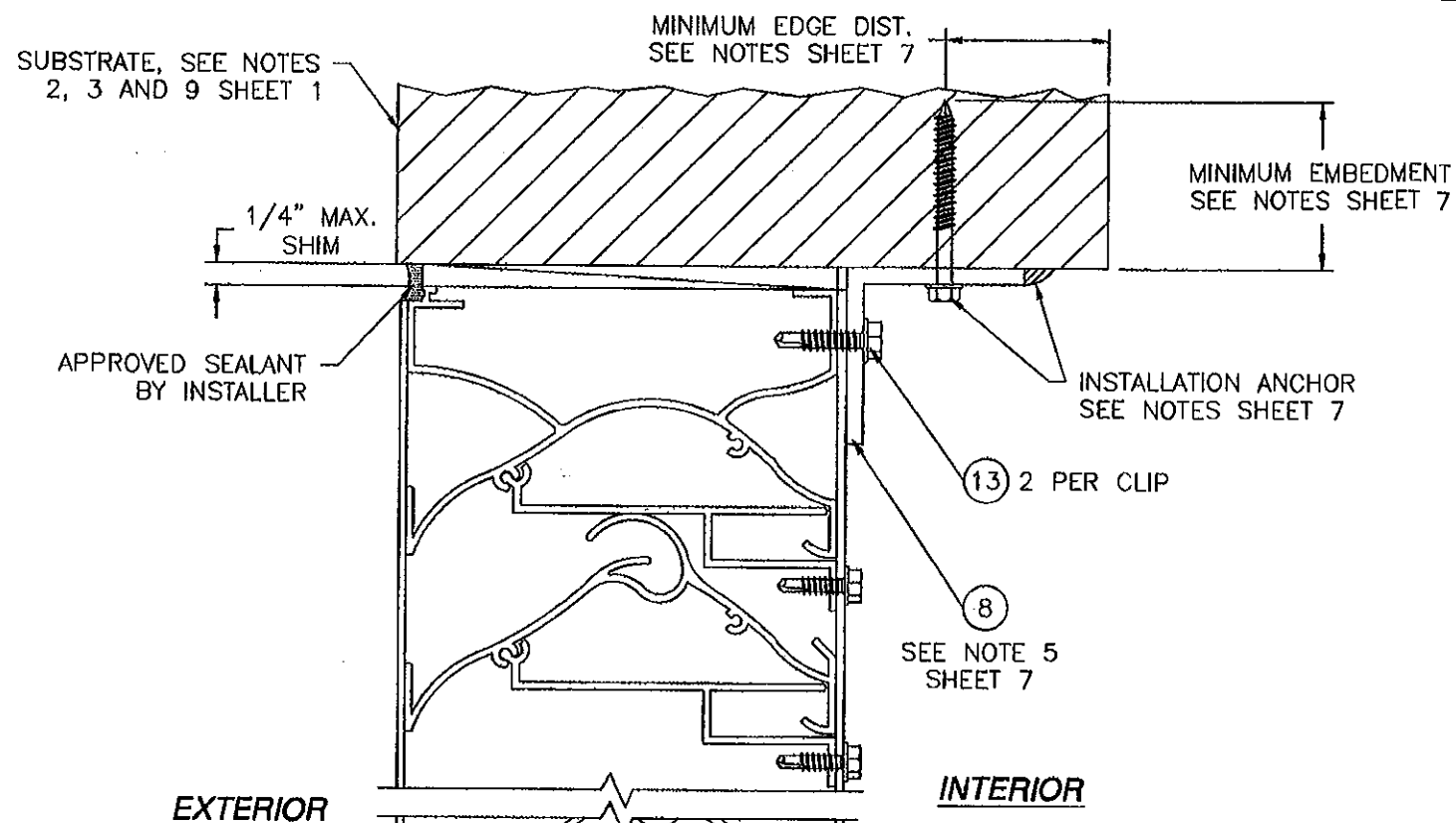
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LEADER INDUSTRIES, INC.
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
CROSS SECTIONS

DRAWN: TJH DWG NO. 08-01058 REV A
SCALE NTS DATE 07/19/10 SHEET 6 OF 12

[Signature]
3/15/11
Luis R. Lomas, P.E.
Florida No. 62514



EXTERIOR

INTERIOR

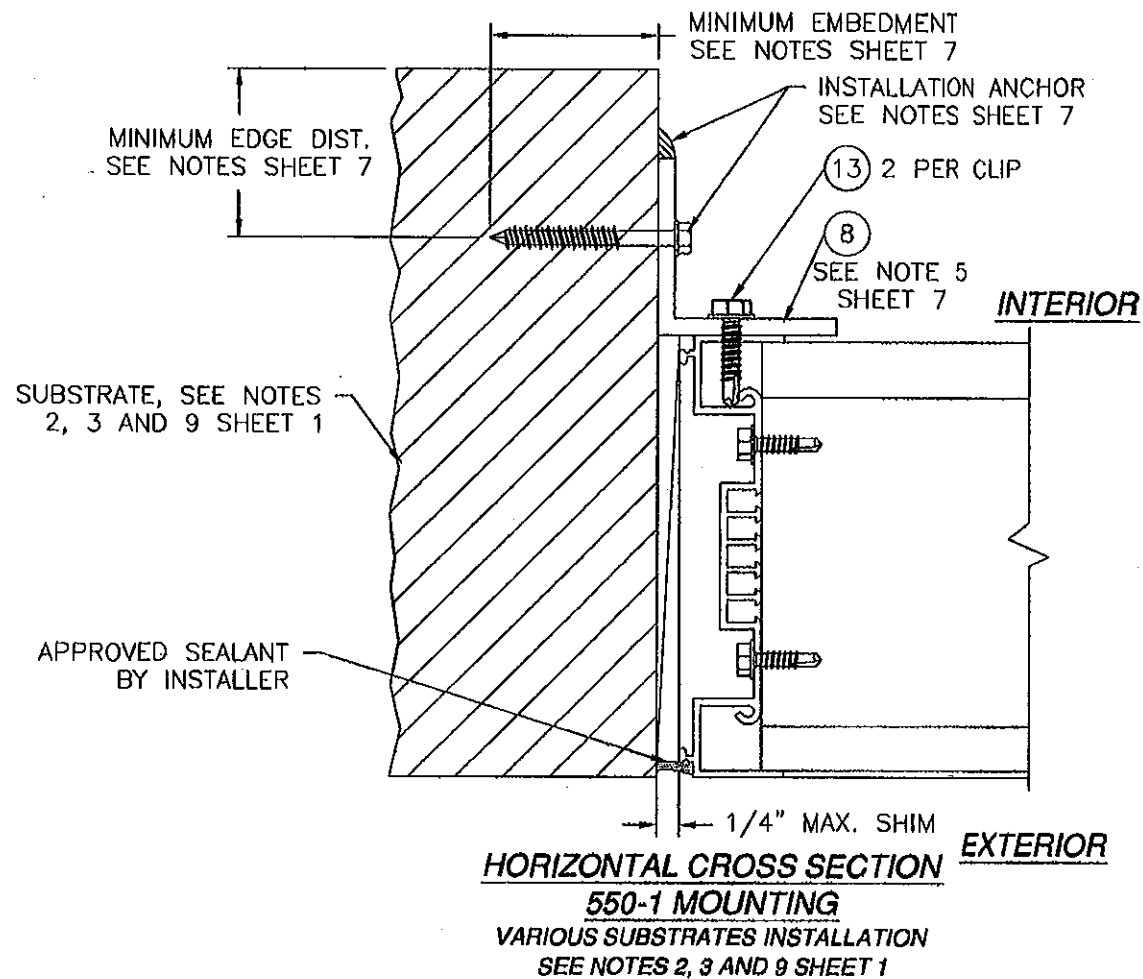
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By *[Signature]*
Miami Dade Product Control

APPROVED SEALANT
BY INSTALLER

1/4" MAX.
SHIM

SUBSTRATE, SEE NOTES
2, 3 AND 9 SHEET 1

VERTICAL CROSS SECTION
550-1 MOUNTING
VARIOUS SUBSTRATES INSTALLATION
SEE NOTES 2, 3 AND 9 SHEET 1



HORIZONTAL CROSS SECTION
550-1 MOUNTING
VARIOUS SUBSTRATES INSTALLATION
SEE NOTES 2, 3 AND 9 SHEET 1

NOTES:

- 1) FOR ANCHORING CLIP INTO CONCRETE USE 5/16" ITW TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 3/16" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 2) FOR ANCHORING CLIP INTO WOOD FRAMING OR 2X BUCK USE 5/16" LAG SCREW SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 5/16" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1 1/4" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 3) FOR ANCHORING INTO 14GA. (.078" MIN.) STEEL FRAMING USE 5/16" DIAMETER SELF-TAPPING SCREW WITH SUFFICIENT LENGTH TO ACHIEVE 3-THREAD PITCH MINIMUM BEYOND THE SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 4) FOR WELDING TO 16GA. (.060" MIN.) STEEL FRAMING USE 1/4" x 1 1/2" FILLET WELDS. LOCATE WELDS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 5) FOR ANCHOR SCREWS USE ITEM #8. FOR WELDING INSTALLATION USE 2" x 2" x 1/8" x 2" LONG A36 STEEL CLIP.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01--04--11	01/05/11	R.L.

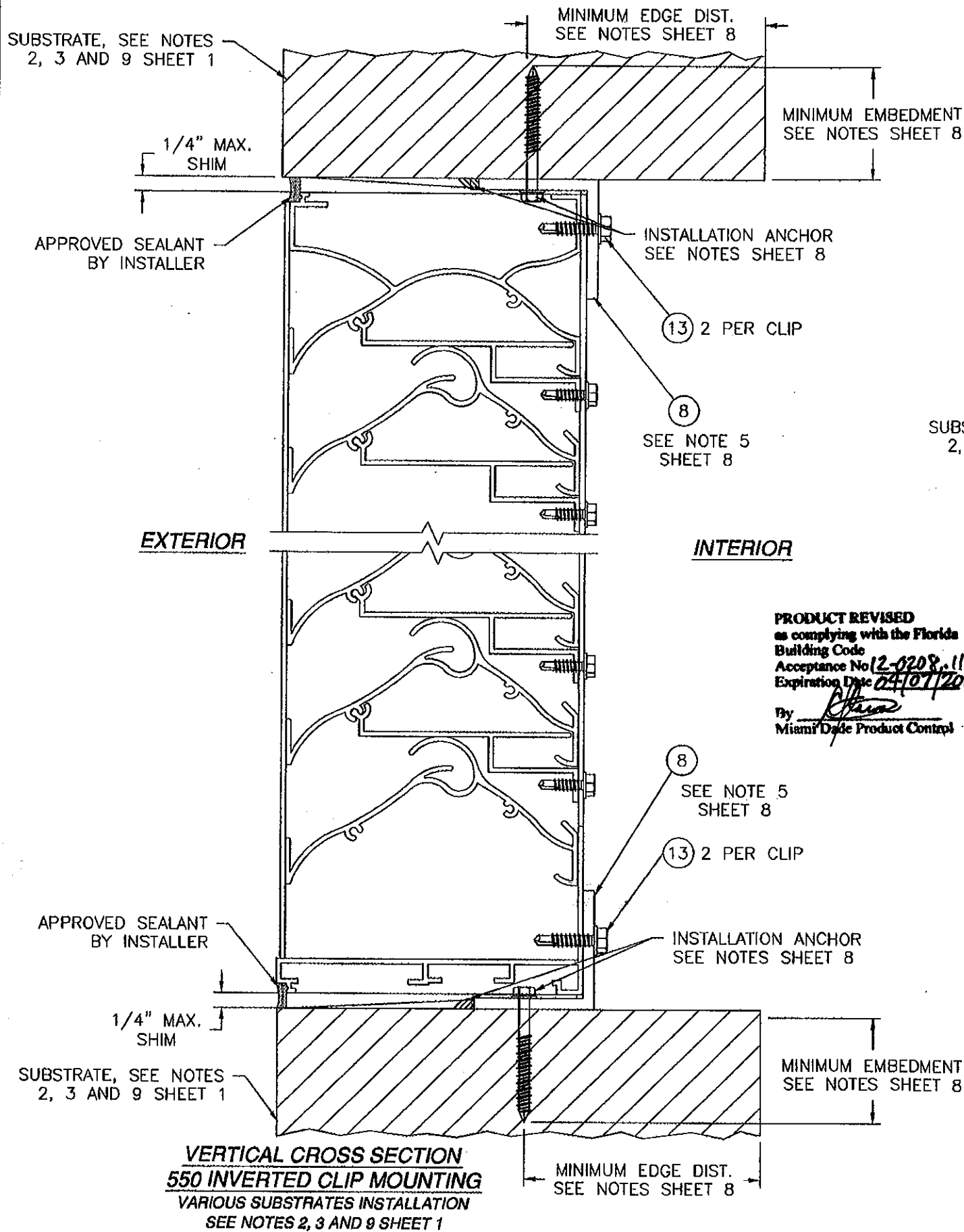
LEADER INDUSTRIES, INC.
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
INSTALLATION DETAILS - 550-1 MOUNTING

DRAWN: TJH	DWG NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 7 OF 12

Approved as complying with the
Florida Building Code
Date 04/07/2011
NOAA 12-0208.11
Miami Dade Product Control
By *[Signature]*

[Signature]
3/15/11
Luis R. Lomas P.E.
Florida No. 62514

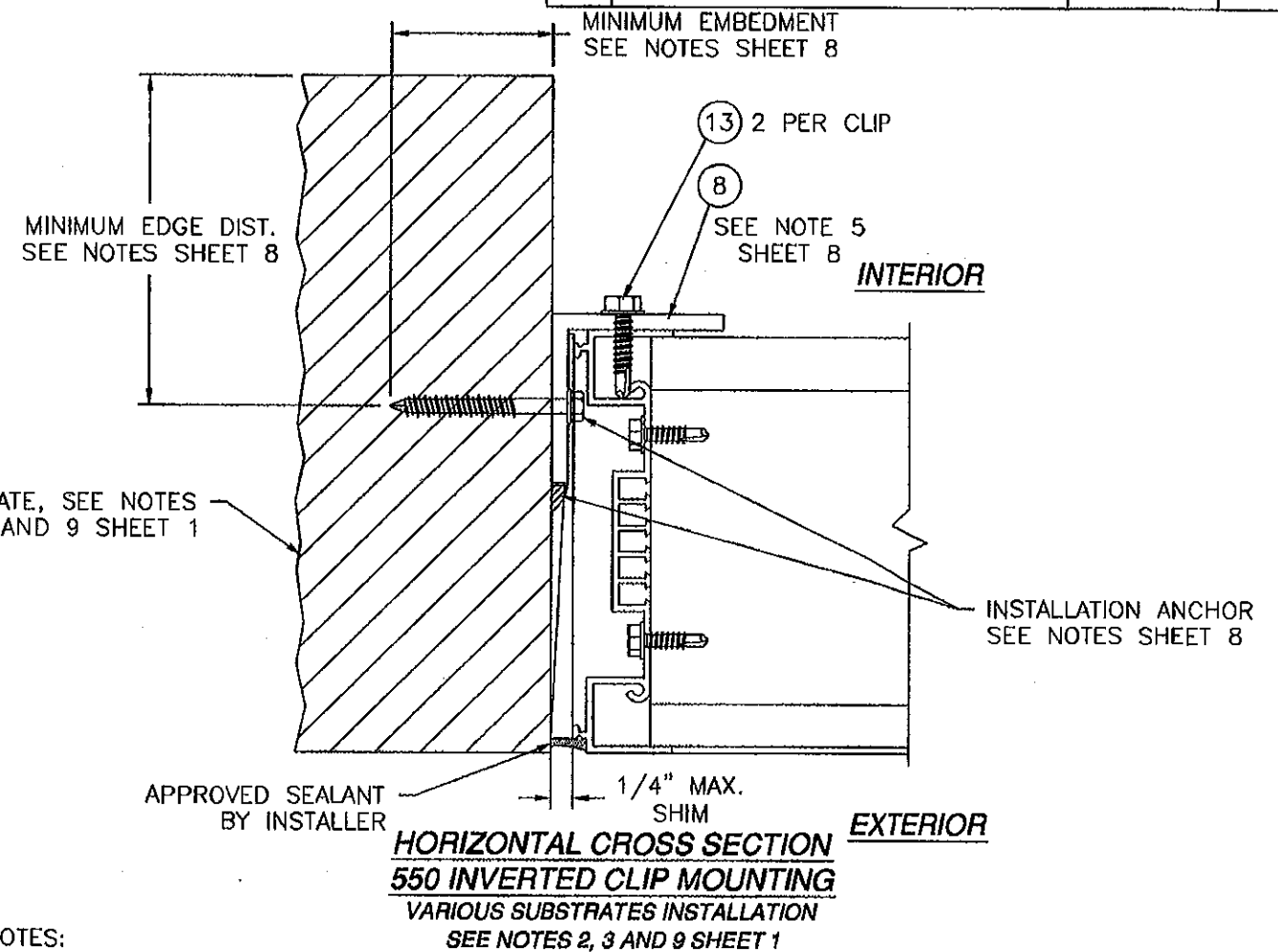


PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0208-11
Expiration Date 04/07/2016
By *[Signature]*
Miami Dade Product Control

NOTES:

- 1) FOR ANCHORING CLIP INTO CONCRETE USE 5/16" ITW TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 3/16" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 2) FOR ANCHORING CLIP INTO WOOD FRAMING OR 2X BUCK USE 5/16" LAG SCREW SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 5/16" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1 1/4" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 3) FOR ANCHORING INTO 14GA. (.078" MIN.) STEEL FRAMING USE 5/16" DIAMETER SELF-TAPPING SCREW WITH SUFFICIENT LENGTH TO ACHIEVE 3-THREAD PITCH MINIMUM BEYOND THE SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 4) FOR WELDING TO 16GA. (.060" MIN.) STEEL FRAMING USE 1/4" x 1 1/2" FILLET WELDS. LOCATE WELDS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 5) FOR ANCHOR SCREWS USE ITEM #8. FOR WELDING INSTALLATION USE 2" x 2" x 1/8" x 2" LONG A36 STEEL CLIP.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



LEADER INDUSTRIES, INC.

2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
INSTALLATION DETAILS - INVERTED CLIP MOUNTING

DRAWN: TJH	DWG NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 8 OF 12

[Signature]
3/15/11
Luis R. Lomas P.E.
Florida No. 62514

SUBSTRATE, SEE NOTES
2, 3 AND 9 SHEET 1

1/4" MAX.
SHIM

5/32" x 1/2"
PLUG WELD
12" MAX. O.C.

APPROVED SEALANT
BY INSTALLER

EXTERIOR

1/4" X 2"
FILLET WELD
12" MAX. O.C.

INTERIOR

APPROVED SEALANT
BY INSTALLER

1/4" MAX.
SHIM

5/32" x 1/2"
PLUG WELD
12" MAX. O.C.

SUBSTRATE, SEE NOTES
2, 3 AND 9 SHEET 1

VERTICAL CROSS SECTION
550-4 MOUNTING
VARIOUS SUBSTRATES INSTALLATION
SEE NOTES 2, 3 AND 9 SHEET 1

13 6" FROM ENDS
AND 12" MAX. O.C.

17

7
CORNER IS
FULLY WELDED

13 6" FROM ENDS
AND 14" MAX. O.C.

7
CORNER IS
FULLY WELDED

17

SUBSTRATE, SEE NOTES
2, 3 AND 9 SHEET 1

1/4" X 2"
FILLET WELD
12" MAX. O.C.

INTERIOR

APPROVED SEALANT
BY INSTALLER

EXTERIOR

HORIZONTAL CROSS SECTION
550-4 MOUNTING
VARIOUS SUBSTRATES INSTALLATION
SEE NOTES 2, 3 AND 9 SHEET 1

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5/32" x 1/2"
PLUG WELD
12" MAX. O.C.

LEADER INDUSTRIES, INC.
2509 CRUZEN STREET
NASHVILLE, TN 37211

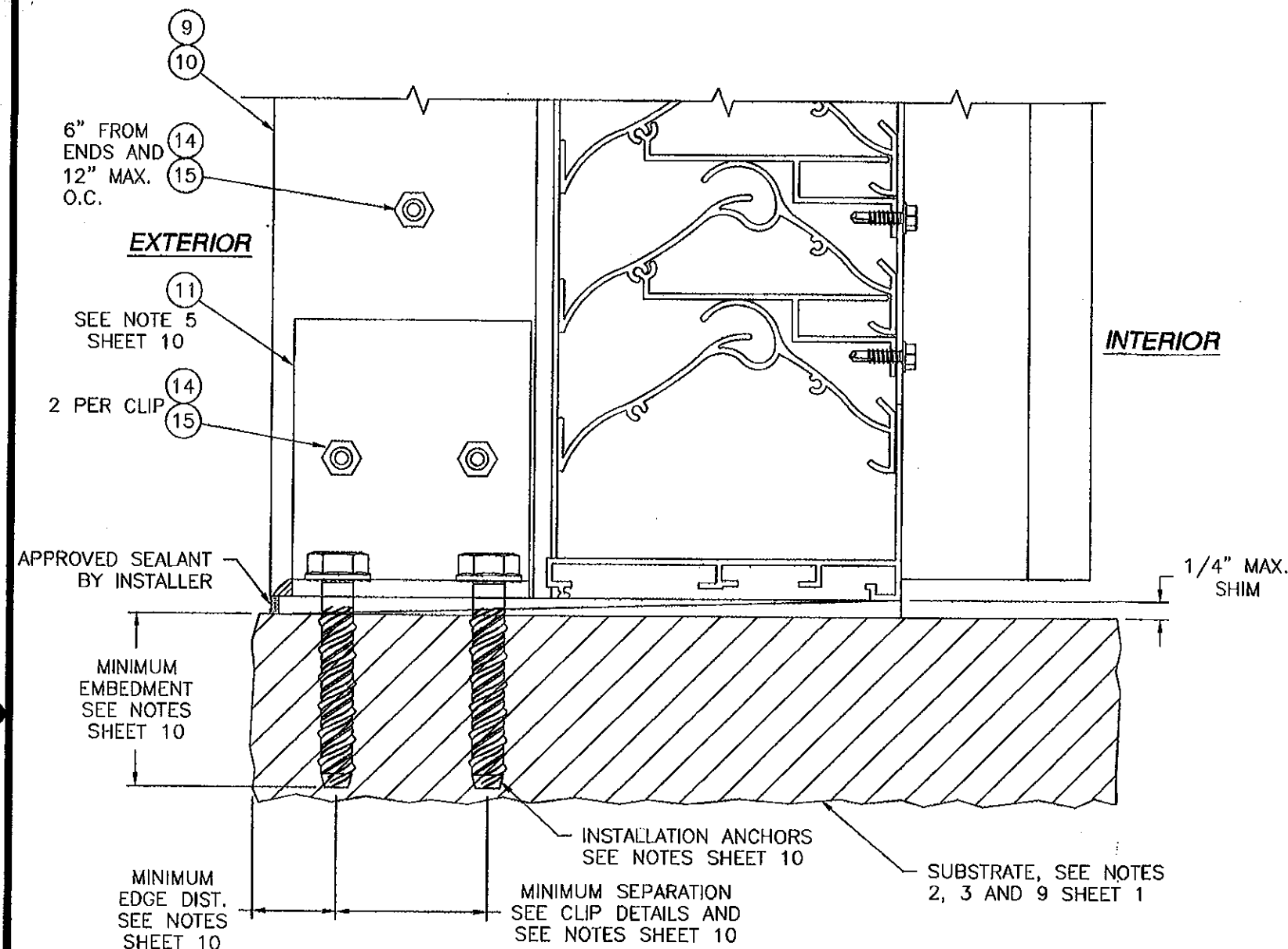
DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
INSTALLATION DETAILS - 550-4 MOUNTING

DRAWN: TJH DWG NO. 08-01058 REV. A
SCALE NTS DATE 07/19/10 SHEET 9 OF 12

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Florida Building Code
Date 04/07/2011
NOAH 10-0920.16
Miami Dade Product Control
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3/15/11
Luis R. Lombas, P.E.
Florida No. 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.

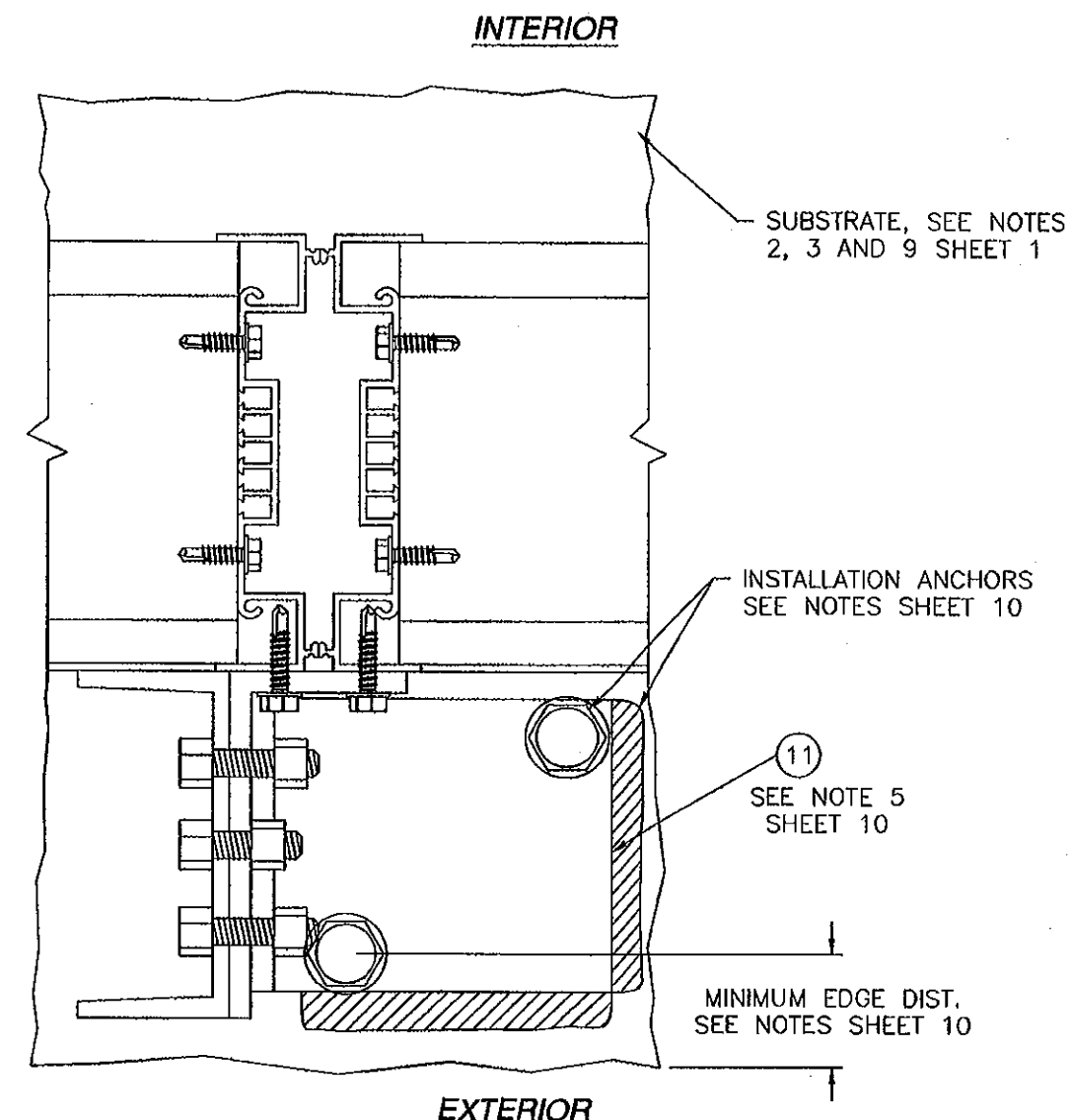


VERTICAL MULLION DETAIL
BOTTOM SHOWN, HEAD SIMILAR

NOTES:

- 1) FOR ANCHORING CLIP INTO CONCRETE USE 1/2" WEDGE BOLT ANCHOR WITH SUFFICIENT LENGTH TO ACHIEVE A 2 1/2" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 5" MINIMUM EDGE DISTANCE AND 2" MINIMUM SEPARATION. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 2) FOR ANCHORING CLIP INTO WOOD FRAMING OR 2X BUCK USE 1/2" LAG SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 2 1/2" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 3) FOR ANCHORING CLIP INTO 3/16" MINIMUM STEEL FRAMING USE 3/8" DIAMETER SELF-TAPPING SCREW WITH SUFFICIENT LENGTH TO ACHIEVE 3-THREAD PITCH MINIMUM BEYOND THE SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 4) FOR ANCHORING CLIP INTO 3/16" MINIMUM STEEL FRAMING USE 3/8-16 GRADE 5 BOLT AND NUT. BOLT TO BE OF SUFFICIENT LENGTH TO ACHIEVE 3-THREAD PITCH MINIMUM BEYOND THE NUT. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 5) FOR WELDING TO 16GA. (.060" MIN.) STEEL FRAMING USE (2) 1/4" x 3 1/2" FILLET WELDS. LOCATE WELDS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 6) FOR ANCHOR SCREWS OR BOLTS USE ITEM #11. FOR WELDING INSTALLATION USE 2" x 4" x 1/8" x 3 1/2" LONG A36 STEEL CLIP.

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HORIZONTAL MULLION DETAIL
BOTTOM SHOWN, HEAD SIMILAR

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Florida Building Code
Date 04/10/2011
NOA# 10-0920.16
Miami Made Product Control
By *[Signature]*

LEADER INDUSTRIES, INC.

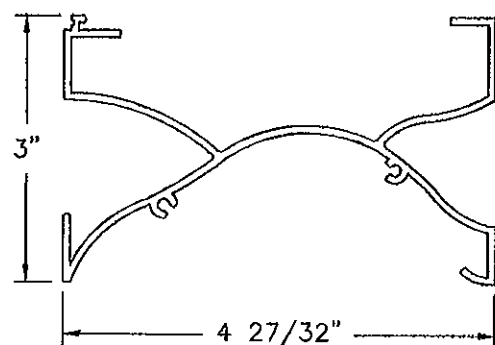
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
INSTALLATION DETAILS - MULLION ANCHOR CLIP

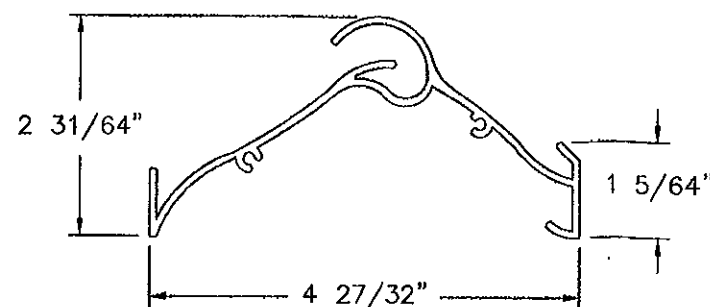
DRAWN: TJH	DWG NO. 08-01058	REV A
SCALE NTS	DATE 07/19/10	SHEET 10 OF 12

[Signature]
3/15/11
Luis R. Lomas, P.E.
Florida No. 62614

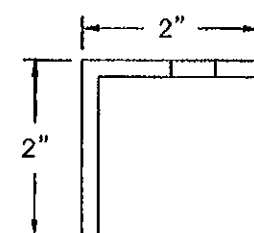
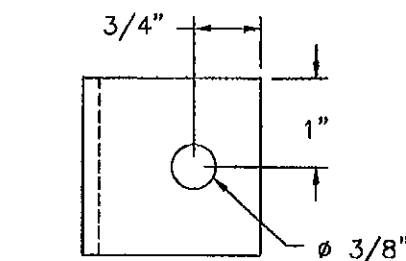
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REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



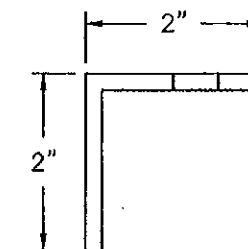
① **HDW550 HEAD**
EXTRUDED ALUMINUM
6063-T5 .080" THICK



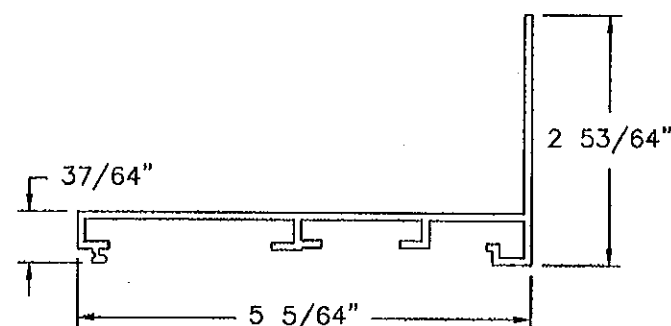
④ **HDW550 BLADE**
EXTRUDED ALUMINUM
6063-T5 .080" THICK



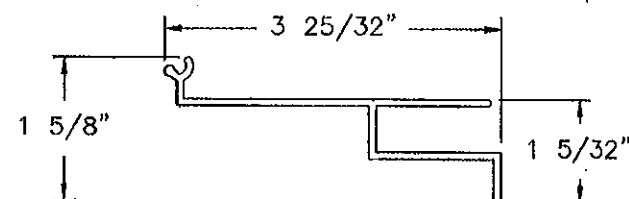
⑧ **2" x 2" x 3/16" INSTALLATION ANGLE**
EXTRUDED ALUMINUM 6063-T5 .1875" THICK



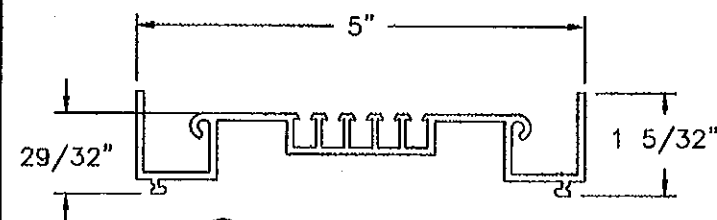
⑪ **2" x 2" x 3/16" CONTINUOUS ANGLE**
EXTRUDED ALUMINUM 6063-T5 .1875" THICK



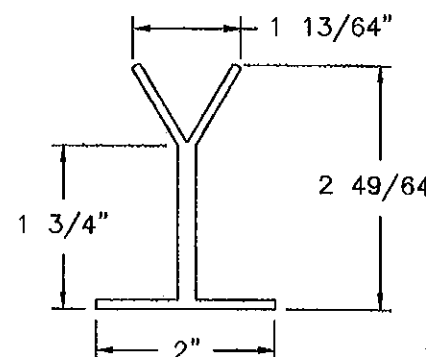
② **HDW550 BOTTOM**
EXTRUDED ALUMINUM
6063-T5 .080" THICK



⑤ **HDW550 BLADE SUPPORT**
EXTRUDED ALUMINUM
6063-T5 .080" THICK

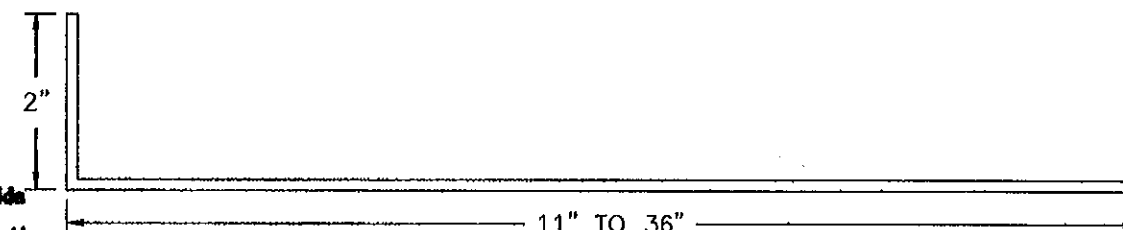


③ **HDW550 JAMB**
EXTRUDED ALUMINUM
6063-T5 .080" THICK



⑥ **HDW550 VERTICAL BLADE SUPPORT**
EXTRUDED ALUMINUM
6063-T5 .202" THICK

PRODUCT REVISED
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Miami Dade Product Control



⑦ **INSTALLATION SLEEVE**
EXTRUDED ALUMINUM
3003 .101" THICK

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NOA# 10-0420-16
Miami Dade Product Control
By *[Signature]*

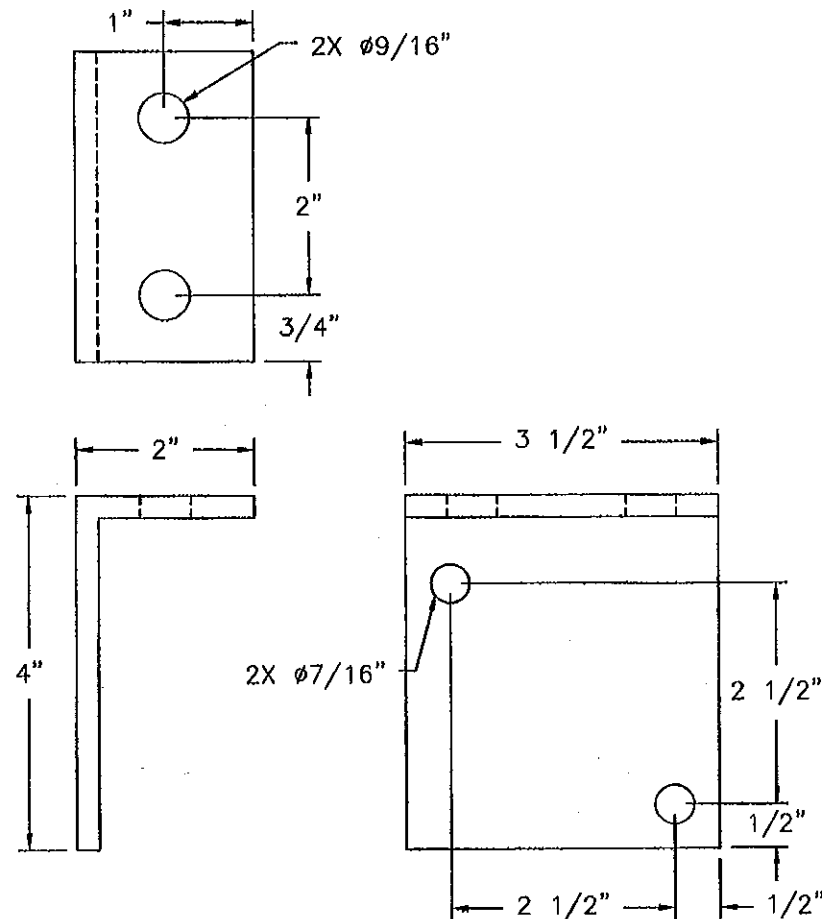
LEADER INDUSTRIES, INC.
2509 CRUZEN STREET
NASHVILLE, TN 37211

DC-HWD550 ALUMINUM VERTICAL LOUVER
MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT
COMPONENTS

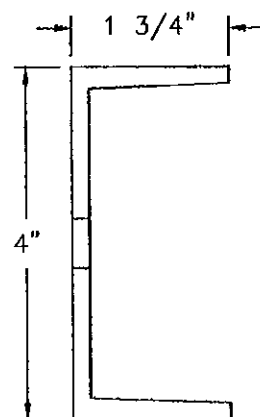
DRAWN: TJH DWG NO. 08-01058 REV A
SCALE NTS DATE 07/19/10 SHEET 11 OF 12

[Signature]
3/15/11
Luis R. Lomas, P.E.
Florida No. 62514

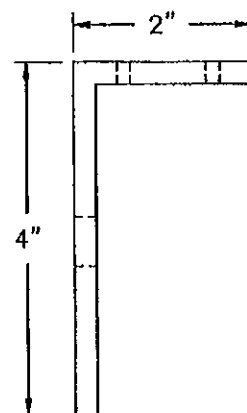
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PER DADE LETTER DATED 01-04-11	01/05/11	R.L.



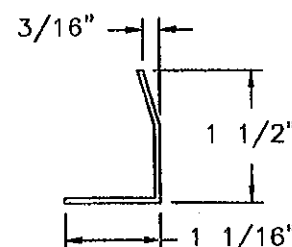
⑪ **2" x 4" x 1/4" x 3 1/2" CLIP**
EXTRUDED ALUMINUM 6063-T5 .25" THICK



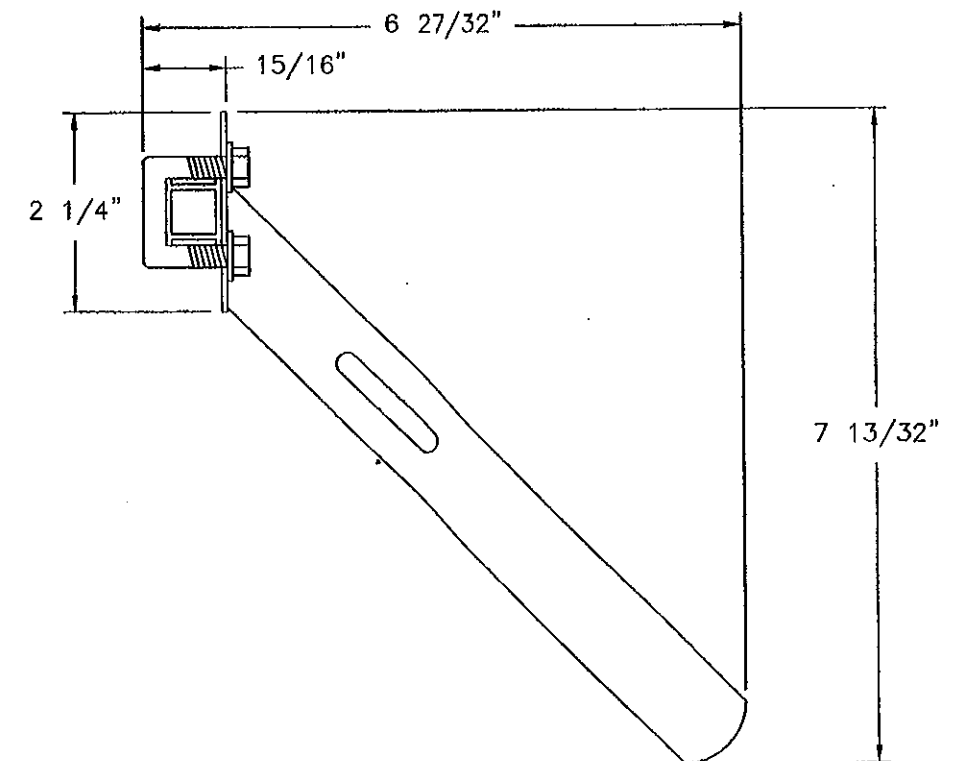
⑩ **MULLION C-CHANNEL**
A36 STEEL .1875" THICK



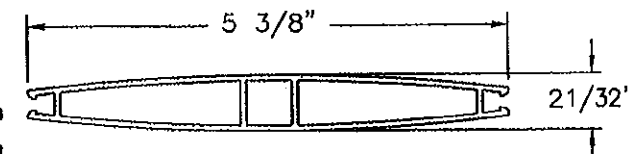
⑨ **2" x 4" x 1/4" MULLION ANGLE**
EXTRUDED ALUMINUM 6063-T5 .25" THICK



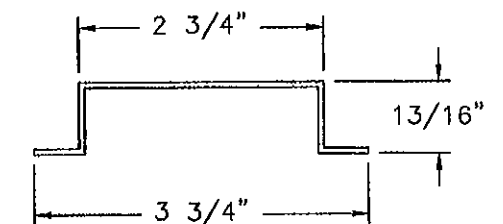
⑫ **EAD DAMPER BLADE STOP**
EXTRUDED ALUMINUM 6063-T5 .0625" THICK



⑬ **HAND QUADRANT**
ALUMINUM 6063-T5



⑭ **EAD DAMPER BLADE**
EXTRUDED ALUMINUM 6063-T5 .064" THICK



⑮ **EAD DAMPER HAT CHANNEL**
EXTRUDED ALUMINUM 6063-T5 .0625" THICK

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Miami Dade Product Control

Approved as complying with the Florida Building Code Date 04/07/2011 NOAH 10-0420-16 Miami Dade Product Control By <i>[Signature]</i>				LEADER INDUSTRIES, INC. 2509 CRUZEN STREET NASHVILLE, TN 37211		<i>[Signature]</i> 3/16/11 Luis R. Lomas, P.E. Florida No. 62514
				DC-HWD550 ALUMINUM VERTICAL LOUVER MULLED AND SINGLE UNITS - LARGE MISSILE IMPACT COMPONENTS		
DRAWN: TJH	DWG NO. 08-01058	REV A				
SCALE NTS	DATE 07/19/10	SHEET 12 OF 12				